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ABSTRACT

Hypotheses of a study of two-hour as opposed to three-hour training blocks for industrial vocational education students were as follows: (1) Achievement of students in a two-hour block for three years will be equal to that of students in a three-hour block for two years, (2) student attitudes toward themselves, school, and the world of work will significantly increase, and (3) there will be a significant decrease in dropout rates and absenteeism. Students in the two-hour vocational block classes at Newport High School (Kentucky) were matched (paired) with three-hour vocational block classes at vocational schools in the northern Kentucky area in parallel programs: printing, construction electricity, mechanical drafting, and commercial art. Pre- and posttests administered to all at the beginning and end of the first year included the Ohio Trades Achievement Test and Bill's Index of Adjustment and Values. Comparisons were made between test results of high school juniors in each matched pair grouping, and dropout and attendance rates were examined for Newport students. No significant conclusions about the effectiveness of the two-hour block could be reached after the project's initial year. Recommendations for continuation of the study include focus on improving both the testing situation and communication between all parties. (JT)

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FINAL REPORT

A STUDY OF A TWO HOUR TIME BLOCK IN INDUSTRIAL EDUCATION

by

Robert E. Gearhart
Project Director
and
Stephen McMillen
Test Coordinator

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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July, 1977
Newport City Schools
Eighth and Washington
Newport, Kentucky 41071

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PREFACE

The authors would like to express appreciation to the educators who assisted in the efforts of this project: Dr. Tom L. Gabbard, Superintendent; Dan Sullivan, Director of Education; James Patton, Region VII Director of Vocational Education; Jack Corwin, Coordinator, Vocational Education; Dr. Ralph O'Brien and Ron Abrams, Professors, Industrial Education, Northern Kentucky University; Robert Spillman, Bureau of Vocational Education; Dr. Glen Davis, Bureau of Vocational Education. Special thanks to George Frakes, Newport High School, and Industrial Education teachers, Jerry Abney, Carol Guffy, Steve Cunningham, and Ron Radenheimer, and to the teachers and administrators of the Vocational Schools in Northern Kentucky who are participating in this project.

The efforts of this project were made possible through an Internship of Stephen McFillen with Northern Kentucky University.

Instrumentation for collection of student achievement was made available by the Ohio Department of Education through Mr. Ray Rinderer, consultant of the Instructional Materials Laboratory at the Ohio State University.

Instrumentation for collection of student attitudes was made available by Dr. Robert E. Bills, Research Professor, University of Alabama.

ABSTRACT

Title of Project: A Study of a Two Hour Time Block in Industrial Education

Project Duration: July 1, 1976 - June 30, 1977

The main objective was to determine if the achievement of students in a two hour block would be comparable to students in a three hour block. Student attitudes, attendance, dropout rates, and teacher evaluations were also gathered.

Students in a two hour block at Newport High School were paired with students in a three hour block at vocational schools in Northern Kentucky.

In the first year it is impossible to determine any significant results. Another two years study is needed.

INTRODUCTION

Industrial Education Programs, historically, have been scheduled in a three hour training block. This provides ample time for instruction, student set up and take down time for individual projects, and job preparation activities. This scheduling approach seems appropriate for a vocational school program.

In any case, Laurel County, Kentucky, just recently completed a study of the use of two hour training periods for vocational preparation programs. During this time the program was changed from a three hour to a two hour training block. At the end of the testing period the teachers and administrators preferred the three hour block over the two hour block.

Newport High School is a completely different situation: an urban as compared to rural setting; academic programs integrated with vocational programs; an emergence of practical arts programs in the seventh, eighth, and ninth grades; an inclusion of sophomores in a preparation program; and a change is made from a one hour block to a two hour block.

Alternative situations may suggest the need for alternative preparation programs and ways in which they are implemented.

In the 1976 - 1977 school year a test group (Newport High School - 2 hour block) and a control group (Northern Kentucky Vocational Schools - 3 hour block) were studied to determine if there would be comparable gain in cognitive knowledge of specific skill areas and related personal attitudes.

The following section addresses itself to this question.

ACTIVITIES AND ACCOMPLISHMENTS

Problems under consideration

The intent of this project was to determine what effect the introduction of a two hour training block will have on the vocational education of industrial education students.

Four major areas were studied: achievement, attitudes, absenteeism, and the dropout rate. The respective objectives were the following:

1. The achievement of students in a two-hour block for three years will be equal to students in a three-hour block for two years.
   A. Compare the achievement of the Newport students in the

two-hour blocks with the achievement of the control groups in the three hour blocks, as evidenced by scores on the Ohio Trades Achievement Test. Pre-tests administered in September, 1976 and Post-tests in May, 1977.

2. Student attitudes toward themselves, toward school, and toward the world of work will significantly increase in the 1976-1977 school year.
   A. Compare the pre-test scores (September, 1976) of 150 students enrolled in industrial education courses to determine attitudinal change as evidenced by scores on the Bill's Index of Adjustment and Values.

   B. Compare the attitudinal change of 150 students in two-hour block with those in the three-hour block as evidenced by scores on the Bill's Index of Adjustment and Values.

3. There will be a significant decrease in those dropping out of school and in absenteeism.
   A. Compare the current dropout rate with the areas in 1975-76 school year.

   B. Compare the attendance record of the vocational students before and after the adoption of the vocational program.

   C. Request a teacher evaluation of the vocational two-hour programs.

   D. Compare the atterdance records of the new vocational program with those enrolled in Business and Office Distributive Education, Agribusiness over the 1976-77 school year.

Methods

The two-hour vocational block classes of Newport High School were matched with the three-hour vocational block classes at vocational schools in the Northern Kentucky area in the following way. Newport High School printing was paired with Northern Kentucky Vocational School printing, Newport High School's construction electricity and mechanical drafting groups were paired with Campbell County Vocational's mechanical drafting and construction electricity classes, and Newport High Schools commercial art classes were paired with Kenton County Vocational's commercial art classes.

After the target groups and control groups were identified the administration of the test battery was initiated. The test used was The Ohio Trades Achievement Test, which consists of a one hour apptitude test (The California Short Form Test of Academic Apptitude) and a two

Part test on the appropriate trade. Each part of the trade test takes between one and a half hours to three hours to complete, depending upon the trade. The administration of this battery is over three consecutive days. The students were given the test battery in September 1976 (pre-testing) and again in May 1977 (post-testing). The tests were scored by the Instructional Materials Laboratory, Columbus, Ohio (Ohio Trades Achievement Test). At the time of the testing no Ohio Vocational Trades Achievement Test had been developed for Commercial Art, so those students were only given the Bill's Index of Adjustment and Values.

All students were administered the Bill's Index of Adjustment and Values, which is an index on attitudes that takes approximately forty - five minutes to complete. These tests were scored by Dr. Robert E. Bills, University of Alabama. (See Appendix I for a brief explanation of Bill's Index and a copy of the test).

The collection of the data on absenteeism and the dropout rate was done at Newport High School. All test administration and collection of data was done by the testing coordinator in an effort to minimize the resulting variables.

Results

The results of Objective 1.A are in Table 1, (Lithographic Printing), Table 2, (Construction Electricity), and Table 3, (Mechanical Drafting). The only fair comparison that can be made at the present involves the High School Junior's in each matched pair grouping.

In Lithographic Printing (Table 1), after the post testing (May, 1977) the Newport High School Juniors were functioning at the twenty-fourth percentile of achievement. In comparison to the national norms for that test, Newport's Juniors are achieving more than twenty-three percent of the norms population who have taken that test, in comparison the Juniors at Northern Kentucky Vocational School are functioning at the eighteenth percentile of achievement. There were no groups to compare with Newport High's Sophomores or with Northern Kentucky Vocationals Seniors, and post High School students.

The results in construction electricity (Table 2) show that at the post testing Newport High's Juniors were functioning at the sixteenth percentile of achievement in comparison to Campbell County Vocational Juniors who were functioning at the nineteenth percentile of achievement. No fair comparison was available for the Newport High Sophmores or the Campbell County Vocational Seniors.

In mechanical drafting (Table 3) the results show that after the post testing, Newport High School's Juniors were functioning at the twelfth percentile of achievement in comparison with Campbell County Vocational's Juniors who were achieving at the fourth percentile

TABLE 1

COMPARISON OF TRADE ACHIEVEMENT SCORES ON THE OHIO TRADES ACHIEVEMENT TEST ON LITHOGRAPHIC PRINTING

School	Grade Level	Pre-Test Number	Pre-Test Raw Mean Scores	Pre-Test Percentile of Achievement	Post-Test Number	Post-Test Raw Mean Scores	Post-Test Percentile of Achievement	Pre vs Post Raw Mean Score Test Change	Percent Change	#National Norms for Raw Mean Scores	Standard Deviation
Newport H.S.	Sophomores	18	114.1	15%	15	117.5	18%	+ 3.4	+ 3%	@	@
Newport H.S.	Juniors	14	127.9	26%	10	125.2	24%	- 2.7	- 2%	135.9	33.9
Northern Ky. Vocational School	Juniors	2	87.0	3%	2	120.0	19%	+33.0	+16%	135.9	33.9
Northern Ky. Vocational School	Seniors	1	143.0	28%	1	153.0	35%	+10.0	+ 7%	156.46	37.0
Northern Ky. Vocational School	Post H.S.	4	162.5	41%	*	*	*	*	*	@	@

* No Post High School Students Took Part In The Post Testing.

Based On A National Sample Of Students From Schools In Ohio, Massachusetts, Missouri and Pennsylvania.

@ National Norms Are Only Available For Juniors And Seniors.

TABLE 2

COMPARISON OF TRADE ACHIEVEMENT SCORES ON THE OHIO TRADES ACHIEVEMENT TEST ON CONSTRUCTION ELECTRICITY

School	Grade Level	Pre-Test Number	Pre-Test Raw Mean Scores	Pre-Test Percentile of Achievement	Post-Test Number	Post-Test Raw Mean Scores	Post-Test Percentile of Achievement	Pre vs Post Raw Mean Score Test Change	Percent Change	National Norms for Raw Mean Scores	Standard Deviation
Newport H.S.	Sophomores	16	75.2	3%	13	83.4	9%	+ 8.2	+ 6%	@	@
Newport H.S.	Juniors	20	80.2	10%	20	91	16%	+10.8	+ 6%	125.7	33.5
Campbell Co. Vocational School	Juniors	27	97.9	21%	24	93.7	19%	-4.2	- 2%	125.7	33.5
Campbell Co. Vocational School	Seniors	9	116.7	26%	9	109.2	20%	-7.5	- 6%	143.0	37.0

Based On A National Sample Of Students From Schools In Ohio, Massachusetts, Missouri and Pennsylvania.

@ National Norms Are Only Available For Juniors And Seniors.

TABLE 3

COMPARISON OF TRADE ACHIEVEMENT SCORES ON THE OHIO TRADES ACHIEVEMENT TEST ON MECHANICAL DRAFTING

School	Grade Level	Pre-Test Number	Pre-Test Raw Mean Scores	Pre-Test Percentile of Achievement	Post-Test Number	Post-Test Raw Mean Scores	Post-Test Percentile of Achievement	Pre vs Post Raw Mean Score Test Change	Percent Change	#National Norms for Raw Mean Scores	Standard Deviation
Newport H.S.	Sophomores	14	73.3	6%	14	93.3	26%	+20.0	+20%	@	@
Newport H.S.	Juniors	13	75.8	8%	10	81.6	12%	+ 5.8	+ 4%	112.0	24.7
Campbell Co. Vocational School	Juniors	21	68.8	4%	13	69.1	4%	+ .3	0	112.0	24.7
Campbell Co. Vocational School	Seniors	7	94.3	12%	4	78.0	4%	-16.3	- 8%	126.8	28.5

Based On A National Sample Of Students From Schools In Ohio, Massachusetts, Missouri And Pennsylvania.

@ National Norms Are Only Available For Juniors And Seniors.

level. No valid comparisons were available for Newport High Schools' Sophomores or for Campbell County Vocational's Seniors. In two, (Lithographic Printing and Mechanical Drafting), of the three groups where valid comparison's were available, Newport High Students were functioning at a higher achievement percentile than their control group peers.

The change in attitude of Newport High Students in the two hour block, (Objective 2.A) as evidenced by Tables 4 and 5 shows no significant increase in attitude. The two most desirable category signs in the Bill's Index of Adjustment and Values are ++, and -+. The four trades tested showed a percentile gain in these category signs in two out of a possible eight instances.

The comparison between the two-hour block and the three-hour block (Tables 6 and 7) for attitudinal change (Objective 2.B) shows no significant difference between Newport High School students in the two-hour vocational block and their three-hour block control group matched pairs in other area vocational schools. The control groups show a gain in attitude in two out of eight instances for the most desirable category signs, which are identical to the results of the Newport High students.

There was a significant decrease in the dropout rate (Objective 3.A, Table 8) of the target group after the adoption of the two hour block. The dropout rate over the 1975-76 school year for the target group was 20.4 percent, after the adoption of the two-hour block (1976-77 school year) it fell to an 11.0 percent rate, a significant decrease of 9.4 percent.

The attendance of the target group (Objective 3.B, Table 9) increased markedly after the adoption of the two-hour block, rising from a 92.46 percent attendance during the 1975-76 school year to a 95.55 percent attendance for the 1976-77 school year, after the adoption of the two-hour block. The result is a 3.09 percent increase in attendance.

The teacher evaluations of the two-hour block (Objective 3.C) are in Appendix II.

A comparison of the attendance rates over the 1976-77 school year of the two-hour vocational programs with the business programs at Newport High School (Objective 3.D, Table 10) shows a 2.25 percent higher attendance rate for the two-hour block programs over this period.

TABLE 4

A COMPARISON OF PRE VS POST TEST SCORES OF NEWPORT HIGH SCHOOL STUDENTS IN THE 2 HR VOCATIONAL BLOCK ON THE BILL'S INDEX OF ADJUSTMENT AND VALUES

Trade	Test	Number	Percentage of Students in each Category Sign ++	-+	+-	--
Electricity	Pre-Test	40	12.5%	25.0%	37.5%	25.0%
Electricity	Post-Test	30	6.2%	15.6%	53.1%	25.0%
Change			-6.3%	-9.4%	+15.6%	0
National Norms			14.3%	21.9%	40.1%	23.7%
Drafting	Pre-Test	23	17.3%	26.0%	34.7%	21.7%
Drafting	Post-Test	17	5.8%	17.6%	35.2%	41.1%
Change			-11.5%	-8.4%	+ .5%	+19.4%
National Norms			14.3%	21.9%	40.1%	23.7%

TABLE 5

A COMPARISON OF PRE VS POST TEST SCORES OF NEWPORT HIGH SCHOOL STUDENTS IN THE 2 HR VOCATIONAL BLOCK ON THE BILL'S INDEX OF ADJUSTMENT AND VALUES

Trade	Test	Number	Percentage of Students in each Category Sign			
			++	-+	+-	--
Printing	Pre-Test	29	0	31.0%	51.7%	17.2%
Printing	Post-Test	16	25.0%	0	62.5%	12.5%
Change			+25.0%	-31.0%	+10.8%	-4.7%
National Norms			14.3%	21.9%	40.1%	23.7%
Commercial Art	Pre-Test	32	6.2%	15.6%	50.0%	28.1%
Commercial Art	Post-Test	27	14.8%	11.1%	40.7%	33.3%
Change			+8.6%	-4.5%	-9.3%	+5.2%
National Norms			14.3%	21.9%	40.1%	23.7%

TABLE 6

A COMPARISON OF ATTITUDINAL CHANGE OF STUDENT'S IN THE TWO HOUR BLOCK WITH THOSE IN THE THREE HOUR BLOCKS AS EVIDENCED BY SCORES ON THE BILL'S INDEX OF ADJUSTMENT AND VALUES

School	Trade	Test	Number	Percentage of Students in each Category Sign ++	-+	+-	--
Campbell Co.	Electricity	Pre-Test	36	13.8%	30.5%	30.5%	25.0%
Campbell Co.	Electricity	Post-Test	34	11.7%	14.7%	50.0%	23.5%
Campbell Co. Electricity Attitudinal Change				-2.1%	-15.8%	+19.5%	-1.5%
Newport Electricity Attitudinal Change				-6.3%	- 9.4%	+15.6%	0
Campbell Co.	Drafting	Pre-Test	27	7.4%	29.6%	48.1%	14.8%
Campbell Co.	Drafting	Post-Test	19	26.3%	26.3%	26.3%	21.0%
Campbell Co. Drafting Attitudinal Change				+18.9%	-3.3%	-21.8%	+ 6.2%
Newport Drafting Attitudinal Change				-11.5%	-8.4%	+ .5%	+19.4%

TABLE 7

A COMPARISON OF ATTITUDINAL CHANGE OF STUDENT'S IN THE TWO HOUR BLOCK WITH THOSE IN THE THREE HOUR BLOCKS AS EVIDENCED BY SCORES ON THE BILL'S INDEX OF ADJUSTMENT AND VALUES

School	Trade	Test	Number	Percentage of Students in each Category Sign ++	-+	+-	--
Kenton Co. Vocational	Commercial Art	Pre-Test	31	9.0%	29.0%	45.0%	16.9%
Kenton Co. Vocational	Commercial Art	Post-Test	27	14.8%	14.8%	44.4%	25.9%
Kenton Co. Commercial Art Attitudinal Change				+5.8%	-14.2%	- .6%	+ 9.9%
Newport Commercial Art Attitudinal Change				+8.6%	- 4.5%	-9.3%	+ 5.2%
Northern Ky. Vocational	Printing	Pre-Test	6	16.7%	16.7%	16.7%	50.0%
Northern Ky. Vocational	Printing	Post-Test	3	0	0	66.7%	33.3%
Northern Ky. Vocational Printing Attitudinal Change				-16.7%	-16.7%	+50.0%	-16.7%
Newport Printing Attitudinal Change				+25.0%	-31.0%	+10.8%	- 4.7%

TABLE 8

COMPARISON OF DROPOUT RATE OF TARGET GROUP
BEFORE (1975-76) AND AFTER (1976-77)
ADOPTION OF 2 HR BLOCK

PERCENTAGE OF DROPOUTS

Vocational Trade	Year 1975-76	Year 1976-77	Percentage Change
Electricity	13.1	9.1	- 4.0
Drafting	36.1	21.2	-14.9
Commercial Art	12.0	11.1	- .9
Printing	*	3.1	*
Average Dropout Percentage	20.4	11.0	- 9.4

* Printing Dropout Data Was Unavailable For 1975-76 School Year.

TABLE 9

COMPARISON OF ATTENDANCE OF TARGET GROUP
BEFORE (1975-76) AND AFTER (1976-77)
ADOPTION OF THE 2 HR BLOCK

PERCENTAGE OF ATTENDANCE

Vocational Trade	Year 1975-76	Year 1976-77	Percentage Change
Electricity	91.27	95.58	+ 4.31
Drafting	92.04	95.34	+ 3.30
Commercial Art	93.83	94.56	+ .73
Printing	*	96.67	*
Average Percentage Attendance	92.46	95.55	+ 3.09

* Printing Attendance Data Was Unavailable For The 1975-76 School Year.

TABLE 10

COMPARISON OF ATTENDANCE RECORDS OF THE 2 HR VOCATIONAL PROGRAMS
WITH THE BUSINESS PROGRAMS AT NEWPORT HIGH SCHOOL
OVER THE 1976-77 SCHOOL YEAR

	PERCENT OF ATTENDANCE 1976-77
* 2HR Block Programs	95.55
# Business Programs	93.30

* Includes Commercial Art, Drafting, Printing, And Electricity Classes.

Includes Business And Office, Distributive Education And Agribusiness Classes.

Conclusions

After two evaluation meeting's the following conclusions were agreed upon:

1. The discrepancy in the testing situation's could have had a major influence on the results.

2. No significant conclusions about the effectiveness of the two-hour block could be reached after the project's initial year.

3. The lack of communication with some of the control groups teachers may have had an effect upon their resultant scores.

Recommendations

The recommendations of the evaluating committee focused on the following areas:

A. It is essential to continue the project in order to facilitate the gathering of meaningful data about the effect of the two-hour block in vocational education.

B. A serious effort should be made to improve the testing situation in order to obtain more reliable results.

C. Communication lines between all parties involved in the project will be strengthened, with the implementation of planning sessions, and periodic "rap" sessions as needed.

D. An effort should be made to locate a commercial art achievement test.

E. A vocational maturity inventory should be added to the attitude section of the testing battery.

F. Composite, rather than individual scores will be focused upon in the attitude section of the testing battery.

All parties involved in the evaluation meetings reiterated the fecling that since the goal of the project is to measure the effect of the two-hour block of vocational education over a three year period it would be unwise at this juncture to evaluate it's effectiveness on a pro or con basis.

DISSEMINATION ACTIVITIES

Due to the lack of significant results in the first year of this study, very little dissemination has been made. Parties involved in this study will be given a copy of this final report. It is important to note that parties involved in this project agreed that periodic planning sessions would be helpful to carry out the objectives of this research project.

BIBLIOGRAPHY

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APPENDIX I

SELF INSTRUCTIONS FOR HSIAV

There is need for each of us to know more about ourselves, but seldom do we have an opportunity to look at ourselves as we are or as we would like to be. On the IBM answer sheet is a list of words that can be used to describe people. Please turn this form so that the self side is face up. Now take each word and apply it to yourself by completing the following sentence:

I AM A (AN)_____PERSON.

As an example the word might be JOLLY, so you would substitute this term in the above sentence. It would read--I am a jolly person. Then decide HOW MUCH OF THE TIME this statement is like you, and rate yourself according to the following key:

1. Seldom is this like me.
2. Occasionally, this is like me.
3. About half of the time, this is like me.
4. A good deal of the time, this is like me.
5. Most of the time, this is like me.

Select the number beside the phrase that tells how much of the time the statement is like you and blacken the answer position corresponding to this number in the block of response positions under the Roman numeral I on the answer sheet. Please use a soft pencil with black lead (no ballpoint pens, please) and make your mark heavy and black. Make it as long as the brackets and completely cover the number of the response position. Please do not make any stray marks. If you make a stray mark or if you wish to change your response, please erase completely. Please be sure to use the IBM card you have been given to make it easier to stay on the correct line.

Now, go to Column II. Use one of the statements given below to tell HOW YOU FEEL about yourself as described in Column I.

1. I very much dislike being as I am in this respect.
2. I dislike being as I am in this respect.
3. I neither dislike being as I am nor like being as I am in this respect.
4. I like being as I am in this respect.
5. I like very much being as I am in this respect.

Select the answer which best suits how you feel about being the kind of person you described yourself as being in Column I and blacken in the correct number of the response under Roman numeral II on the answer sheet.

Finally, go to Column III and using the same term, complete the following sentence:

I WOULD LIKE TO BE A (AN)_____PERSON.

Then decide how much of the time you would like this trait to be characteristic of you and rate yourself on the same rating scale you used above for Column I to show how much of the time you would like to be this kind of person. Make your response under Roman numeral III on the machine scoring blank.

Start with the word active and fill in Columns I, II, and III before going to the next word. There is no time limit but please hurry as rapidly as possible. Be honest with yourself so that your description will be a true measure of how you look at yourself.

PLEASE DO NOT TURN THIS PAGE OR BEGIN ON THE OTHER SIDE OF THE ANSWER SHEET BEFORE NEW INSTRUCTIONS ARE READ TO YOU. THANK YOU.

"OTHERS" INSTRUCTIONS FOR HSIAV

We would like to get a better picture of what you think other people are like. To do this we would like you first to think of other people who are, in general, like you, for example, other high school freshmen, sophomores, juniors, or seniors, and second, to complete the HSIAV as you think the average person in this group would complete it for himself. Please turn your answer sheet so that the "OTHERS" side is face up. Now take each word and use it to complete the following sentence for the average person in your group.

HE IS A (AN) _____ PERSON.

Then decide how much of the time this statement is like this average person, i.e., is typical or characteristic of him in general, and rate him as he would rate himself on the following scale:

1. Seldom is this like he sees himself.
2. Occasionally, this is the way he sees himself.
3. About half of the time, this is the way he sees himself.
4. A good deal of the time, this is the way he sees himself.
5. Most of the time, this is the way he sees himself.

Select the number beside the phrase that tells how much of the time he sees himself this way and record it under Roman numeral I on the "others" side of your answer sheet in the same manner you used to record your responses to the "Self" side. Please continue to use the IBM card to help you keep your place.

Now go to Column II on the "Others" side. Use one of the statements given below to tell how he usually feels about himself as described in Column I and record your response under Roman numeral II on the "Others" side of the machine scoring sheet.

1. He very much dislikes being as he is in this respect.
2. He dislikes being as he is in this respect.
3. He neither dislikes being as he is nor likes being as he is in this respect.
4. He likes being as he is in this respect.
5. He very much likes being as he is in this respect.

Finally, go to Column III on the "Others" side. Using the same term, complete the following sentence:

HE WOULD LIKE TO BE A (AN) _____ PERSON.

Then decide how much of the time this average person in your group would like this trait to be characteristic of him and rate him on the following five point scale:

1. Seldom, would he like this to be him.
2. Occasionally, he would like this to be him.
3. About half of the time, he would like this to be him.
4. A good deal of the time, he would like this to be him.
5. Most of the time, he would like this to be him.

Record your response under Roman numeral III on the "Others" side.

"OTHERS" INSTRUCTIONS FOR HSIAV (continued)

Please start with the word ACTIVE and fill in Columns I, II, and III before going on to the next word. Also please continue to use the IBM card as a guide.

THANK YOU

THE INDEX OF ADJUSTMENT AND VALUES

The I.A.U. was developed by Dr. Robert E. Bills of the University of Alabama in the early 1950's. The stimulus for the Development of this research instrument was: (1) to study and assess the self concept, and (2) the need for schools to have available a system with which they could assess the affective consequences of their work.

Variables in the effective realm are difficult to observe and to measure. If they were continuously evident to teachers, even to the extent that change in cognition is evident, teachers would attend more closely to them, and as a result of their teaching, would work harder to create learning climates more conductive to positive affective change. Since these measures are so difficult to assess, teachers only infrequently have any notion of the effects of schools on the affective lives of students. This system provides teachers with the information they need to improve the affective climates for learning and the affective learnings of students. Each part of the system measures a variable or variables of central importance to the perceptual theory of educational development.

This system has five parts: (1) Information about self-concept, (2) acceptance of self, (3) concept of the ideal self, (4) discrepancy between self and ideal self, (5) comparable measures of perceptions of other people.

The information derived from the scores helps a school to know the level of feeling of the students. The information is given at a level which enables the school to assess what improvements and changes are needed, not just that change is needed. Finally, since the system is fully computerized, it provides schools with a rapid turn-around of information which can be in any form the schools desire, for example, by sex, grade level, or any other desired factor.

AN EXPLANATION OF THE INDEX OF ADJUSTMENT AND VALUES (I.A.V.) CATEGORY SIGNS

Often the Index of Adjustment and Values is used in test-retest situations to assess change due to the manipulation of an experimental variable. The I.A.V. yields several scores but a primary concern is the research has been with the scores which represent a person's self acceptance (How he feels about his own worth) and his beliefs about the self acceptance of other people in his peer group. Basically, the scores separate people into four categories: ++, -+, +-, and--. In each instance the first of the two signs relates to the self score and the second sign

relates to the others scores. These scores may be used to represent four groups of people.

The ffrst of these groups, ++ people, have acceptance of self scores greater than the average of the population on which the I.A.V. was standardized and "others" scores equal to or greater than "self" scores. The second group, -+, has self acceptance scores below the population average and "others" scores equal to or greater than the "self" scores. The third group, +-, has self scores above the population average, but "others" scores less than "self" scores. The last group, --, has acceptance of self scores below the population average and "others" scores less than "self" scores.

Each of these four groups has distinguishing characteristics. The research studies have been concerned primarily with ++, -+ and +- groups, since the subjects used for the studies were drawn from groups which only infrequently included a significant number of -- people. There is increasing evidence, however, that the number of -- people in the general population is mounting significantly and rapidly.

To Summarize:

The ++ person is basically secure. He holds positive attitudes toward himself and others. Essentially he is cooperative, assumes responsibility and excercises imagination and creativity. He is tuned to his own needs yet at the same time he is sensitive to the rights and feelings of others. He does not yield to arbitrary authority but will cooperate with duly constituted authority. At the same time he may work to modify the views of the authority but will do so directly rather than by devious means. Once he accepts responsibility for a task he may be expected to carry it to a satisfactory conclusion. This person feels little need to defend himself; thus, he seldom lies or steals. He has few aggressive impulses and thus is seldom guilty of stealing or vandalism. If he ever gives an impression of rudeness or insubordination, it is fairly certain that he has been "pushed" rather forcibly. Since he uses his capacities efficiently, he would less often be over age in school or severely retarded.

The -+ person yields readily to arbitrary authority but he does so with inner resentment that may be expressed in lying, cheating, stealing and occasionally in vandalism. Vandalism is expecially likely to occur when he is in a group where he desires acceptance and where only peer authority exists. Since he basically distrusts himself he leans heavily on authority. When that authority is absent, he has no guideposts. He is not a delinquent. His delinquent acts are infrequent and once punished are seldom repeated. At school he readily accedes to authority and becomes submissive. He is infrequently absent or tardy unless authority at home has failed to insist that he be present and on time. This however, is not the usual case.

Since he is -+ because of the arbitrary authority which has been exercised at home. He lies and steals occasionally but this is an effort to protect himself. He gives the impression of being a responsible person and this he is, when the demands are made by other people. He is not responsible when he makes his own decisions or when he is required to initiate tasks on his own. He experiences considerable unhappiness. Far too often, unfortunately, he is viewed at home and at school as a "good" child and is rewarded by teachers and other adults.

The +- person is basically a -+ person who is defending himself against other people. It is likely that he basically mistrusts himself. But, this view of himself is too painful so he defends himself against it. He deals with the external world and with other people, seldom involving himself and continuously directing attention away from himself. He has respect for constituted authority but avoids accepting responsibility where possible. He would like to be the authority and as such is quite arbitrary. Although he lies, cheats, and sometimes steals, he is seldom caught since he defends himself so well. His attitude toward authority and more especially his own authority often leads to tardiness, absenteeism, rudeness and insubordination. He is likely to do much talking in class and to be a non-participator. Since he uses his abilities inefficiently, he is likely to be over age and retarded in his studies. His high degree of perceptual inaccuracy combined with his lack of respect for authority operate to produce his retardation.

Less is known about the -- person than about the other groups. This type of person questions the worth of people, including himself. He has a high level of negativism. He is uncooperative, unimaginative, and irresponsible. His stealing and cheating may be motivated by a desire to hurt other people. For the same reasons he may be rude and insubordinate. It is expected that he will not assume responsibility for his work, that he is a non-participator, is often retarded, has reading difficulties, and is habitually absent or tardy. Where as the -+ person may commit occasional acts of vandalism and may profit form being apprehended, the -- person may commit a series of acts and does not profit from punishment. As would be expected the -- person shows little interest in school work.

Of all people whose ideal descriptions are below their self descriptions on the I.A.V., the most frequently occuring are -- people. These people do not idealize the traits included on the I.A.V. These traits are near and dear to the hearts of teachers and other school personnel. Thus, the -- person has a "built-in" conflict with school personnel and eventually disappears or (Drops-out) from the schools. The most likely drop out is the -- person.

APPENDIX II

TEACHER EVALUATIONS
Graphic Arts, Newport High School
Jerry Abney
June 6, 1977

Following is a digest of observations regarding the Newport High School Graphic Arts Program and recent evaluation and testing.

Curriculum outline:

Offset Printing

1. Composition, paste-up, art-developing camera-ready copy
2. Design and planning procedures
3. Darkroom - use of process camera and processing line and halftone negatives
4. Stripping and platemaking
5. Press operation
6. Folding, binding, collocating, cutting
7. Cost calculation
8. Job estimates

Photography

1. Camera use and technique
2. Films and processing (B & W, color, transparency)
3. Prints-darkroom technique, color and B & W
4. Negative analysis
5. Color filtration
6. Commercial and portrait photography
7. Lab technology

Silk Screen Process

1. Composition and art preparation
2. Film positives
3. Plate rendering techniques
4. Direct emulsion plates
5. Flat work and related jobs
6. Textile printing
7. Inks and dyes
8. Ink curing

Situation

We are now involved in a two-hour block study plan. Students in their second and third year are in graphic arts for one third of their total school day. Following are observations concerning the two-hour block concept:

1. This plan eliminates the "beat the clock" syndrome which is part of lab situations with one hour classes.

2. Allows more time to develop skills, as well as learn basic procedures. Extended periods allow time to complete procedures, analyze results and pin-point corrections.

3. Highly motivated individual students are able to advance into more creative projects.

Justification

For a balanced curriculum in graphic arts we have developed concentration in these areas: offset printing, photography and silk screen process printing.

The basis for our study is found in the concept that since the beginning of time, man has developed communication systems that will fulfill his needs. As the world of early man began to expand, it became necessary for his to develop systems which would enable him to communicate to large numbers of people over greater distances. He made use of symbols to relay his messages. The development of the alphabet, for example, helped man make great strides to meet his communicative needs. Man became more skilled at drawing, thus expanding further his use of symbols.

With the increased demand for several copies of a message, man developed techniques of reproducing his messages or images. To improve these techniques, man had to develop certain skills to become more efficient at reproduction. The development of these skills is what we are primarily concerned with in our area of vocational education. Skill development only comes as a result of repeated practice in an area of concentration.

In developing the graphic arts program at Newport High School, we have attempted to form a curriculum that will allow students the opportunity to specialize in an area of interest hopefully to set the groundwork for future employment in that area.

As ninth graders, our students spend one semester in graphic arts for one hour a day. This situation is more for an overview of graphic communication. Time does not allow much concentration but we anticipate a general introduction to what graphic arts is all about.

In their sophomore and junior years the students are involved in a program of two hour block classes that allow for more study, more time to develop projects that will lead to skill development. By the end of their second year in graphic arts, we attempt to move them into an area of interest that they want to pursue in the job world. Specifically, the areas are offset printing, photography and silk screen process printing.

By the time the students get to their third and final year as seniors we hope they are settled into an area of graphic arts that will be best suited to their individual needs and abilities. Careful guidance is necessary at this point to help them find the proper direction to take.

Our senior students spend every minute possible working in their concentrated area in an attempt to develop skills as follows:

Offset printing

1. Rendering good high-contrast camera-ready copy through proper design and lay-out techniques.

2. Learning proper darkroom technique including; anatomy and use of the process camera, ortho films and their characteristics, darkroom chemicals use, processing good line and halftone negatives.

3. Develop good technique in photo-masking and the exposure and processing of offset plates and proper use of tools and equipment involved.

4. Develop good habits of safety regarding press operation. Also, the anatomy and use of offset printing presses, set-up and make-ready procedures, inks and chemicals involved to render good reproduction.

5. Develop skills in the use of machinery and tools necessary in the binding area, such as, folding, binding, collocating, cutting, etc.

6. Set the groundwork for understanding problems in financial decision making, cost calculation and job estimates.

Photography

1. Develop skills in proper camera use and technique for portraiture, still life, candid and fun photography.

2. Develop appreciation in photography as an art form.

3. Develop proper darkroom techniques in the use of films and chemicals.

4. Develop skills in the photographic area we refer to as darkroom lab technology, including, films and their characteristics, processing chemicals and their characteristics, use of color and B & W enlarges, the technology involved in color negative analysis, use and programming of color negative analizers, proper use of chemistry and papers to process anything from a small print to a large mural photograph.

5. Processing all types of B & W, color and transparency film.

Silk Screen Process Printing

1. Develop skills in rendering proper composition and good camera-ready copy for reproduction.

2. Use of process camera and other equipment necessary to

render proper film negatives and/or film positives and the use of chemicals necessary for this work.

3. Study areas of plate rendering techniques in use now in the industry.

4. Develop skills in proper technique for rendering good direct-emulsion plates.

5. Develop skills in rendering good quality reproduction on flat work and textiles.

6. Study types and characteristics of inks and dyes and their use and proper drying and curing methods necessary to render quality work.

7. Develop skills in proper set-up and clean-up.

Testing and Evaluation

Evaluating the students at Newport High School in the graphic art program by using a test that is concentrated in the offset printing area seems to be, at this point, unrealistic. As outlined above, our students do not study just offset printing and it would appear unfair to evaluate them on that basis. For almost two-thirds of our students offset printing was a part of only their introductory curriculum.

A tool of evaluation covering the wide range of graphic communication would seem to be more realistic, at least in our situation. The development of our curriculum is not based on idle speculation of what the industry is but rather a study of the area of graphic arts as a whole. A study of industry in our area reveals possibilities of employment for individuals who have a good background in offset printing, photography, photographic lab technology, film and print processing, silk screen printing, silk screen platemaking.

Further evaluating our students, whose exposure to equipment is limited, by using the same evaluation technique as other schools and/or classrooms, would be similar to comparing apples to oranges and rendering pears. Exposure to processes, and actual practical experience with them is our best means of vocational education. Our students are limited sometimes by our lack of providing equipment and tools for their use. By contrast, many of our local vocational schools have much more to offer from the standpoint of facilities and equipment.

TEACHER EVALUATION
Commercial Art, Newport High School
Carol Guffey
May 31, 1977

The Commercial Art program at Newport High School has helped some of the students. The attendance has improved considerably since last year. Many of my students received awards in art contests this year and one student won a full scholarship to Northern Kentucky University. Several students are going to earn money this summer through their art training. One student lettered signs for a local furniture store during the school year. She made extra money for herself as well as getting some job experience.

The new equipment that was bought has indeed helped to stimulate the students interest in commercial art as well as helping them to learn certain techniques. The two hour blocks that were designed worked out very well with the students. They had enough time to get out the equipment, use it properly, and then to clean up. I also found that my lesson plans could be extended for better projects or longer projects that needed more time than one hour.

Many of the commercial art students will return to the program next year. A few students have decided to go on to other vocations, but I am sure this program has helped them to decide what they really want to do in a vocation.

TEACHER EVALUATIONS
Construction Electricity, Newport High School
Ron Radenheimer
June 10, 1977

The advantages I see in my industrial electricity class over last years course, is in the amount of time spent in class. This years class is a 2 hour block as opposed to the 1 hour block from last year. This time advantage allowed more work to be accomplished. The student's were able to work in a relaxed atmosphere rather than being pressed to get work done in only an hours time. This time advantage also enabled the class to experience more hands on work which is vital to industrial electricity curriculum. Without this hands on experience the students can not fully understand what the total scope of electricity engulfs.

Another advantage is the time I, the teacher, have to spend working with each individual student. This time allows me to devote more of my efforts in solving the problems with students on an individual basis.

I also have observed that the attitudes of the students toward their work has a positive approach over the past year. With more time to work on their projects they have been able to be more productive in their work.

Some disadvantages I have encountered with the new program have come along the lines of equipment. With more time devoted to class and the addition of secondary students, the course is not equipped to handle the demands of the curriculum. More equipment is needed to meet the requirement of the course as it should be taught. Without this equipment the students will be severely handicapped in their learning process.

TEACHER EVALUATIONS
Drafting, Newport High School
Steve Cunningham
June 1, 1977

The structure of the program itself is basically sound but lacking in the areas of counseling, placement, and equipment.

The program as it now exists has many advantages over the past years.

1. The 2 hour blocks afford the students more work time. It eliminates frustration on the part of students and instructor by providing adequate class time for set-up and clean-up yet leaving enough time to carry out essential classroom activities.

Students over all attitudes and attendance have improved considerably. They want to gain a better understanding of the career possibilities and how they and their chosen career will fit into the scheme of things.

Students should be more carefully screened and counseled as to the program itself and its purpose. At present there is very little, if any, screening that takes place.

I have developed a pre-test that I administer to incoming students to determine general abilities and their knowledge of what drafting is:

The test includes:

1. use of measuring scales
2. free hand sketching
3. identification of drafting instruments and equipment
4. brief description of a member of drafting areas and careers
5. identification of geometric figures and constructions
6. commonly used abbreviations
7. simple math functions (mostly dealing with fractions)

The program is lacking greatly in providing students with exploration and orientation experiences at the 7, 8, and 9th grade levels. Most students are not equipped with the information needed to make an intelligent career choice based on aptitudes and abilities. Too many students are channeled into one course or another solely because there is an opening in a particular area.

Correcting this situation would hopefully cut down on the number of students who make a vocational choice and become frustrated because they lack interest or basic skills and abilities to achieve goals they have set for themselves.

NEWPORT CITY SCHOOLS

DR. TOM L. GABBARD, SUPT.
NEWPORT, KENTUCKY 41071

July 26, 1977

JUL 27

Robert E. Spillman
Director
Division of Vocational Programs Supporting Services
Bureau of Vocational Education
Capital Plaza Tower
Frankfort, Kentucky 40601

Dear Bob,

Attached is the final report. If you have any questions, let me know.

A Continuing Proposal will be forth coming in a few days.

Thanks for all of your help this year.

Sincerely,

Robert Gearhart

Robert Gearhart
Director of Federal Programs

RG/jlg

Enclosure